

Medicaid Accountable Care Organizations: A Case Study with Boston HCH Program

March 2018

Accountable Care Organizations (ACOs) are one approach states are taking to redesign their health care delivery systems. These models implement value-based payment structures with shared financial risks and rewards, improve care coordination, and assign more responsibility for patient outcomes directly to providers. To date, 12 states have active ACOs specific to their Medicaid programs and 10 states are in the process of implementing them within Medicaid.¹ Participating health care providers in these states will experience many changes in how reimbursements are calculated and how services are organized and delivered.

As an example of a Health Care for the Homeless (HCH) project participating in an ACO model of care, this case study highlights the Boston Health Care for the Homeless Program (BHCHP) to illustrate how ACOs are incorporating health care providers who serve patients experiencing homelessness. While each state's health care system is unique in many ways, some factors will be common to all ACOs and are particularly relevant to providers treating patients without homes. This case study will focus on five common aspects:

- Identifying homelessness and assigning patients to providers or networks
- Building medical complexity and social determinants of health into payment structures
- Tracking performance measures
- Adapting workforce processes
- Including other homeless service providers (e.g., shelters and housing programs, outreach and case management, etc.)

As more states consider implementing ACOs within their Medicaid program, this case study offers the HCH community more information about key components important to serving patients without homes, lessons learned from one program that others might consider applying to their own planning efforts, and strategies for making ACOs work well for a vulnerable population.

ACO Model in Massachusetts

MassHealth (Massachusetts Medicaid agency) used an 1115 Medicaid Waiver to authorize the new ACO structure, allowing the state to spend \$52 billion over 5 years and generate \$29 billion in federal funding.² Five explicit goals drive the vision behind this new system:³

- Enact payment and delivery system reforms that promote integrated, coordinated care; and hold providers accountable for the quality and total cost of care
- Improve integration of physical health, behavioral health, long-term services and supports, and health-related social needs
- Maintain near-universal coverage
- Sustainably support safety net providers to ensure continued access to care for Medicaid and low-income uninsured individuals
- Address the opioid addiction crisis by expanding access to a broad spectrum of recovery-oriented substance use disorder services.

Beginning on March 1, 2018, 17 ACOs together with networks of providers, hospitals and other community partners will be working under a new structured system designed to meet those five goals.⁴ Each ACO will be responsible for providing comprehensive health care for attributed members, maintaining networks of providers, screening members to identify needs, performing assessments and coordinating care, and implementing team-based care management for all patients enrolled in the ACO.

Included in the new funding model is \$1.8 billion in federal Delivery System Reform Incentive Program (DSRIP) payments, which will phase out over five years.⁵ Most of these dollars support investments in the ACOs directly for changes in infrastructure.

These funds in part will also directly support 26 state-procured “Community Partners” who deliver behavioral health and long-term services and supports.⁶ These funds will enable a broad infrastructure of partnerships between ACOs and community-based providers. Of the 26 Community Partners procured, 18 are specifically designated Behavioral Health Community Partners (BH CPs). These providers aim to improve outcomes for ACO members with serious mental illness and/or substance use disorders, filling responsibilities that include:^{7 8}

1. Outreach and engagement of assigned members
2. Identify and facilitate care team members
3. Conduct comprehensive assessments and person-centered treatment planning
4. Coordinate services across the continuum of care
5. Support transitions in care
6. Provide health and wellness coaching
7. Facilitate access and referrals to social services
8. Provide medication reconciliation

Provider participation in an ACO is optional; however, forgoing involvement would have several implications. First, providers would not have access to the new funding that is specifically aimed at bolstering care coordination and building capacity for other flexible services not typically funded elsewhere. Second, the provider would not be able to participate in the shared risk payment models, which ultimately are intended to better account for social determinants of health and reward high quality care. Third, patients will be auto-assigned to an ACO based on their primary care provider (with an opt-out provision), so most people are expected to be participating. Providers who are not affiliated with an ACO would need to enter into agreements with the ACOs in order to avoid restrictions on being able to provide services to homeless members that are not attributed to them, or otherwise risk losing those patients to other providers who may not have the model of care or established patient relationships often needed to care for a vulnerable population.

While there are a myriad of other provisions in the MassHealth Medicaid ACO Waiver, the combination of the ACO networks of providers coupled with the state-procured BH CPs are the two largest components of the new system affecting homeless health care. Though the system had a pilot program in place with six of the ACOs since December 1, 2016 to help identify issues in advance of the statewide start date, some details are still unknown. At the time of this publication, providers are entering into agreements with ACOs in good faith that the principles and goals of an ACO will be realized when rollout starts on March 1, 2018.⁹

Boston HCH Program as an ACO provider

BHCHP is a large, stand-alone HCH program that served over 11,000 patients in 2016 and is located in a downtown, urban setting with immediate proximity to six hospitals.¹⁰ The wide range of existing partnerships that BHCHP has with many area systems of care combined with broad Medicaid coverage and a long history of providing care to people who are homeless in Boston may make BHCHP unique compared to other areas of the country, but planning for and implementing aspects of an ACO system is altogether new.

“BHCHP HAS A UNIQUE COMMITMENT TO OUR MEMBERS WHO ARE HOMELESS OR HOUSING UNSTABLE. THE ACO PROGRAM PRESENTS A UNIQUE OPPORTUNITY TO FIND NEW WAYS OF INTEGRATING THE MEDICAL, BEHAVIORAL HEALTH, LONG-TERM SERVICES, AND HEALTH-RELATED SOCIAL NEEDS FOR THIS COMPLEX POPULATION. WE ARE PLEASED TO HAVE PROVIDERS LIKE BHCHP LEADING INNOVATIONS TO IMPROVE CARE FOR THESE MEMBERS.”

– DANIEL TSAI, ASSISTANT SECRETARY FOR MASSHEALTH

Participating in an ACO affords a number of opportunities for BHCHP, to include sharing in the resources designed to promote better patient outcomes and care coordination, and building the capacity for services that have traditionally not been recognized as a vital component of care in the broader health care system. It is also a way of better integrating patients who need a wide range of services into the larger system being constructed. Finally, BHCHP did not want to risk their patients being assigned to providers in the area who may not have the model of care needed to address their total social and health care needs, without being able to provide additional services to those members.

In order to participate as fully as possible in the ACO, BHCHP is filling two roles: first as a primary care provider with the Boston Accountable Care Organization (called “BACO,” which is affiliated with Boston Medical Center, a large regional hospital network and BHCHP’s largest partner), and second as a state-procured Behavioral Health Community Partner (BH CP). These dual roles allow the organization to maximize its role as a medical and behavioral health care provider that also combines case management, outreach, care coordination and other non-medical services. It has also been a participating provider in the state’s ACO pilot program, which has allowed an early view about the changes needed to adapt to the new model.

Identifying Homelessness & Assigning Patients

The single most difficult issue for BHCHP is that attribution (patient assignment) with regard to the ACO is based on the clinician listed in the MassHealth database. Most patients have another primary care provider (PCP) listed even though in many instances BHCHP is in fact the PCP in practice. Patients that are already assigned to BHCHP through MassHealth will automatically be assigned to BHCHP and their respective ACO, so continuity of care is not interrupted. Planning for this transition has involved comparing numerous patient lists to ensure no one is overlooked, and that everyone is assigned appropriately. New patients selecting BHCHP as their primary care provider will be enrolled in BHCHP’s ACO system; however, not all patients screened as homeless in the larger system will be automatically assigned to BHCHP.

Even though MassHealth does not have any specialty BH CP providers, the ACO recognizes the expertise that BHCHP brings in the care and care coordination of people experiencing homelessness. To help the ACO identify patients who are homeless, BHCHP is entering the ICD-10 code for lack of housing (Z59.0) into the patient health record on the problem list and to the visit diagnosis for clinical encounters.¹¹ This allows it to be added to the billing information, which is the mechanism for communicating risk factors like homelessness to payers. On a quarterly basis, providers document the interventions taken to address the problem (e.g., conducting a housing assessment, referring to case management, etc.). Historically, BHCHP has not used the code since the vast majority of its patients are homeless; therefore, this is a new workflow that they are incorporating into standard procedures. BHCHP distributed buttons and placed stickers at workstations that said, “Take the Time to Code Z59!” to remind providers to use the code. Internal workflow reports track the coding rates by team, and site managers receive a list of patients with upcoming appointments that may need to have the code entered into the record. These actions have significantly increased the rate of coding for homelessness in the past six months.



Use of the code will also occur in the hospital (usually in an inpatient setting) when patients are identified as homeless. Because payments to the ACO include an adjustment for homelessness (see below), ACOs are strongly encouraging providers to ask about housing status and code for homelessness when it is appropriate. This is the first time such a broad-based effort will be focused on coding for this social determinant of health in Massachusetts.

Building Medical Complexity & Social Determinants of Health into Payment Structures

Financing throughout the new system attempts to reward high performance but balance factors that contribute to high costs, like having a patient population that has complex needs and frequent use of the health care system. There are three different types of financing arrangements, depending on the type of ACO a system has chosen. Under the BACO model, the state pays the ACO an annual capitated rate, meaning it gets a set amount of money

per patient assigned to it based on the cost of care in the prior year. Risk is built into this model; if an ACO stays within the capitated rate, then it gets to keep a portion of the savings. However, if the total cost of care exceeds the rate, it is partially responsible for that loss within the ACO (meaning the state does not fully reimburse for the loss).¹²

What makes this ACO payment model different is the risk adjustment to the capitation rate that is based on medical complexity, selected medical conditions, and social determinants of health (disability and housing instability). Recent studies have shown the financial impact of these factors, which drive additional costs.¹³ For each risk factor, the annual capitated rate to the ACO is adjusted to account for a greater service intensity (see Table 1).¹⁴ Note, however, the risk adjustment payment is paid to the ACO, not to the provider delivering care.

Table 1. Approximate Incremental Adjustments for Risk Factors Common to People who are Homeless

Risk Factor	Approximate Incremental Adjustment
Homeless (using Z59.0 code)	\$550
Serious mental illness	\$2,250
Substance use disorder	\$2,000

There are six specific mental health diagnoses and seven substance use disorders that will qualify for an adjustment rate.¹⁵ These “add-on’s” are cumulative, so if a patient is identified as homeless with a qualifying mental illness and substance use disorder, the ACO would receive approximately \$4,800 more each year in addition to the usual capitated rate.

As a health center, BHCHP’s role is to serve all its patients regardless of ability to pay, insurance status, or ACO affiliation. To date, the agency receives Medicaid reimbursement on a fee-for-service basis under the Prospective Payment System (PPS rate) common to many health centers for providing a bundled package of services. Importantly, BHCHP receives Medicaid PPS payments even when patients have been assigned to other primary care providers. Of its 11,000 patients, typically only 20-25% are attributed to BHCHP as the assigned provider in the MassHealth system. In part, this is due to serving a highly mobile population that may only receive episodic services from BHCHP once or twice. Moving forward it is anticipated that BHCHP will at least, in part continue to receive PPS payments even when patients are assigned to another provider and/or ACO, but this is the key factor to monitor.

In addition to receiving Medicaid PPS payments as a health center, BHCHP will also receive a per-member-per month (PMPM) rate from the DSRIP funds from two distinct funding streams. First, funding will be received for being competitively selected as a Behavioral Health Community Partner (BH CP). These funds are expected to last five years and are designed to build capacity to pay for wraparound services that typically are not Medicaid billable (case management, care coordination, outreach, etc.) but are nonetheless essential to support people with more complex needs. BHCHP will receive the PMPM rate for patients that have been assigned to its BH CPs and are enrolled and engaged in care, regardless of whether they are the primary care provider. After the DSRIP funds expire in five years, MassHealth’s plan is to have BH CPs negotiate new rates with the ACOs. There are a broad range of homeless service providers that have formed a Social Determinants of Health (SDH) Consortium with BHCHP (see section on other homeless service providers), so a portion of BH CP funds will be shared across the Consortium with BHCHP acting as the lead entity. Second, BHCHP will also receive partial DSRIP funds (shared with the affiliated ACO) for their attributed patients that are in the ACO, which will help build infrastructure to care for patients under this new model.

There are a few areas surrounding reimbursement that are yet to be clear. First is how the risk adjusted add-on payments at the ACO level will filter down to front-line providers who are responsible for providing services and realizing patient-level outcomes. Second, about 40% of BHCHP patients are anticipated to qualify for the BH CP PMPM funds, leaving funding for case management and other supportive services needed by the other 60% of patients to be covered through traditional health center funding sources. Third, it is yet to be determined whether

the BH CP PMPM will be sufficient to manage a population that needs intense wraparound services. Fourth, it is unknown the long-term plan for funding the BH CP services after the DSRIP funds taper off and then expire after five years.

Tracking Performance Measures

There are currently 39 quality measures under six domains outlined for all ACO partners in the state (see Appendix A). These domains include prevention and wellness; chronic disease management; behavioral health/substance use; long-term services and supports; avoidable utilization; and progress towards integration.¹⁶ In the first year, providers will receive some DSRIP funds to build the infrastructure and report data on these measures; however, in subsequent years, an accountability score will be assigned that is a composite of these measures and weighted to each provider. This score then is used to calculate anticipated cost savings and provider payment adjustments. Each ACO has performance goals to meet based on all providers in its network; hence, BHCHP's scores combine with all other providers in the same ACO. This is intended to create competition with other ACOs in the state, and the pooled nature of the measures creates a collective interest for all providers in the ACO to work together to achieve high quality outcomes. Ultimately, the accountability score will be risk-adjusted to account for those ACOs taking on more complex patients, which is intended to help counter the dis-incentive to enroll high-need patients.

“IN THE END, THIS IS ABOUT DEMONSTRATING THAT THE CARE WE PROVIDE IS TRULY IMPROVING HEALTH AND MAKING A POSITIVE DIFFERENCE IN OUR PATIENTS’ LIVES. THAT’S WHAT MATTERS.”
– BARRY BOCK, BHCHP CEO

Many of these measures were already part of BHCHP's data collection and were reviewed monthly; however, because they have been participating in the ACO pilot, BHCHP already receives data about patients based on these outcomes. Switching to a new electronic health record that aligned with the ACO made the process easier since the system was already configured appropriately. Refining internal data analysis has been an arduous yet critical component of preparing for ACO participation, and additional staff have been added to help bolster this area of programming.

Adapting Workforce Processes

In addition to data systems, there is also an additional focus on strengthening team-based care in a performance measurement environment. BHCHP is in the process of adding a team coordinator to each of the existing care teams who will be responsible for monitoring the metrics and being sure all the elements of care come together well. For example, for a panel of 500 patients, BHCHP currently has a number of providers, nurses and care coordinators that work together as a team. Adding a team coordinator will help facilitate team huddles, ensure specific patient screenings are conducted, and keep an eye on daily schedules to improve overall metrics. Getting ownership and accountability for these internal workings is an opportunity to improve overall patient health so this is an adjustment in the short run, but an anticipated improvement in care over the longer term.

Currently, BHCHP is outlining the specific roles and responsibilities for how care coordinators differ from case managers (as well as other positions), and the new roles for the team coordinators. As with any reorganization, this has been an opportunity to re-examine what is working well and what could be improved. Moving forward, it is still uncertain how BHCHP will be held accountable for the majority of its patients who are “one-touch” patients and how these measures will specifically translate into reimbursement levels.

Including other Homeless Services Providers

For BHCHP, becoming a Behavioral Health Community Partner was key to building greater capacity to conduct care coordination and improve performance standards, as well as share in the DSRIP funding that has been specifically designated for this group of providers. BHCHP has been partnering with shelters, supportive housing providers, and others who serve BHCHP patients to improve cross-sector collaboration and service delivery coordination. The goal is to share responsibility for health outcomes across the wide range of service providers involved with patients in various ways, exchange information, and better manage care. These other providers

working with BHCHP will receive support for a care coordinator and funding to build capacity and infrastructure through a monthly payment based on the number of patients in their caseload. This type of financial and data reporting relationship is currently being tested on a small scale and lessons learned will be implemented more broadly; hence, it is still unclear how responsibility will be shared across multiple shelters for one patient (for example) or how funding will be adjusted over time as the process becomes better understood. While BHCHP is the lead, the collaborations with other service providers also have the potential to elevate issues related to homelessness more broadly.

Challenges & Next Steps

Because this is an entirely new way of organizing and financing care for Massachusetts Medicaid recipients, there are a number of uncertainties and challenges to be addressed. The single biggest challenge is to ensure that BHCHP stays true to its mission and makes adjustments to accommodate this new business and care model. The adjustments need to be measured and fit within the existing framework. Workforce recruitment is another challenge. Some present positions may need to be reconfigured and new care managers, nurses and social workers will need to be hired. However, other Community Partners in Boston and across the state will also be hiring for these same positions, putting pressure on a limited pool of potential candidates with the right balance of skills and values to work with a complex patient population. A third challenge is identifying the physical space needed for this type of expansion and shifting staff and operations to accommodate the growth in personnel. While these are current priorities to address, workforce recruitment and the need for additional space are not unique concerns in the health care field. The ACO implementation specifically presents two additional challenges:

- **Patient turnover:** Currently, BHCHP experiences a 50% patient turnover each year due largely to “one-touch” patients, but is able to bill Medicaid at the PPS rate for patients even when they are not the assigned provider. While high turnover is not unique among HCH projects nationally, it is very different compared to other community health centers serving a more stable patient base. It is not yet certain whether BHCHP will be paid its PPS rate for non-attributed patients once the ACO is operational and many of the patients are not formally assigned to BHCHP as the primary care provider.
- **Lack of risk-adjustment in the Community Partner payment:** Because a patient population that is homeless has a wide range of social and health needs, it is more difficult to provide care coordination and case management. However, the BH CP payment is the same regardless of acuity, housing status, or social complexity. It is unknown whether the payment rate will be sufficient to cover the costs of such intensive wrap-around services in order to meet the needs of a more complex population. That said, BHCHP is uniquely positioned to provide these care management services since care is provided across 40+ sites, which will make face-to-face encounters much easier.

The next step for BHCHP is to establish the value of its model of care in a new environment. Because the organization had long-ago integrated primary care, behavioral health, and case management services, it has a better infrastructure compared to some other community providers who do not have these systems already in place and part of their culture of care. Over the years, a lot of time has been spent on outreach and building relationships with hospitals and other partners, but now data analytics is a key factor in negotiations.

Lessons Learned & Advice to Others

BHCHP has been involved in planning ACO implementation for almost six years, which has taken a tremendous amount of time and energy even when much was still unknown about how it would work. While this allowed them to be at the table since the beginning, it has also meant less time available for other projects and issues important to the organization. Applying to become a Community Partner was the right decision given patient needs, but the process took a significant amount of work and ultimately will be a small portion of the care provided.

Relationships with other providers and hospitals have been key to forging partnerships. Although many people have understood that BHCHP did good work for a high-need population, the organization is now able to use data to illustrate the number of emergency department visits, the number of 30-day readmissions, quality metrics, and the extent of the total costs (total cost of care) to the system (as well as other measures). Using this kind of data has allowed BHCHP a greater role in decision-making about what services are needed to better address social determinants of health within the larger system of care in Boston.

Lastly, one possibility with an ACO is that it will try to replicate all services within its own structure, building a new system of services rather than leveraging existing community services (which, in many instances, have existed for years with significant long-term patient relationships). MassHealth has worked to mitigate this issue but this can be an issue in other states as they move to an ACO model.

Other HCH Projects

There are seven HCH projects in Massachusetts, and each is unique to the community it serves. Perspectives from two of these projects illustrate how different factors can determine the anticipated impact of the ACO implementation, as well as the experience leading up to it.

ACO Implementation in a Non-Urban Setting: In Cape Cod, MA, Duffy Health Center is a stand-alone HCH project that serves about 3,300 patients a year. There is one hospital on the Cape, and Duffy is collaborating with their ACO along with two of the three other health centers. Becoming a BH CP was not feasible for a smaller program like Duffy, so they are now a contracted partner with High Point Treatment Center, the BH CP for that area. The majority of patients at Duffy are local to Cape Cod, so attribution to the ACO should be seamless for billing and referrals within the local network of providers. As a health center, Duffy will continue to serve patients without regard to ability to pay or ACO attribution; however, for those patients that are transient, there may be increased pressure on existing grant funding if there are significant changes to the proportion of clients not able to be billed through the ACO if they are not formally assigned to Duffy.

As the new delivery system is implemented, Duffy is looking forward to stronger quality management, broader referral networks, and an increased focus on population health and social determinants of health. To prepare for these changes, they are changing EHR systems to align with the one already used by others in the ACO network, which allows for more efficient data sharing. Two anticipated challenges include recruitment of a clinical workforce that is trained to focus on population health and quality metrics, and conducting required assessments on all assigned patients within a 90-day window and then developing subsequent care plans within a 30-day time period. At this time, Duffy is educating staff about the changes coming with the new ACO, and will be communicating with patients in accordance with the state's timeline.

- *Advice:* Talk to a wide range of people to figure out where you best fit in and align your existing partnerships in the most streamlined way possible.

ACO Implementation at a Public Health Department: In Springfield, MA, the City's Department of Health & Human Services is the HCH grantee (a public health department), which serves about 3,500 patients and contracts with Mercy Medical Center (a hospital system) to provide medical services. At this time, the HCH program and its patients will remain outside the ACO because the project is located within the health department and is not a traditional community provider. However, as 30,000 new patients in the area are attributed to Mercy's ACO with a requirement to conduct assessments, new patients with unstable housing are likely to be identified. These patients will not be referred to the HCH project, but instead remain with the ACO. Mercy is currently assembling a team comprised of a manager and two community health workers who will work with ACO clinical care coordinators to

Key Factors:

- Mitigating the financial risk of caring for high-need patients
- Attributing patients to the appropriate providers
- Realizing payment for patients not attributed to the HCH program
- Sharing responsibility for patients using multiple service providers
- Structuring your practice to balance payment with integrity of the care model
- Improving health outcomes

screen and code patients who are homeless and connect them within the ACO to services (to include BH CP services as needed). Hence, there will be two teams of people focused on homeless health care—those at the HCH project within the health department and those within the ACO network. Both teams will be working together to share best practices in meeting the needs of their respective patient groups who are homeless. Using ACO funds, there is a proposal to add a 10-bed medical respite program that would serve any patient experiencing homelessness, regardless of whether they participated in the ACO. The opportunity with this project would be to offer a tangible and highly needed service to both teams, as well as educate the ACO network about how best to conduct care coordination and adopt “the HCH model of care” into the larger system.

- *Advice: Invite yourself to the table even if you are a small program because the answers the ACO is seeking are going to be found in your model of care.*

Conclusion

As Massachusetts moves forward with implementing its Medicaid ACOs, starting open enrollment in November 2017 and then going live in March 2018, providers like BHCHP and other HCH projects in the state are making significant changes to staffing, program design, data analytics, financial projections, program development, and community partnerships. While some details related to payments, patient assignments, and ultimate accountability are still unclear, the commitment to improving patient health is undeniable. BHCHP is using the new ACO delivery care model as an opportunity to recognize social determinants of health in a tangible way, refine patient care, and demonstrate with data how a comprehensive care model like the one at BHCHP can compete with other mainstream providers. As other states move forward with Medicaid ACO plans, some of these early experiences might help inform others’ planning and participation.

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References

¹ A brief fact sheet and snapshot related to how 10 states are implementing ACOs, see Center for Health Care Strategies (February 2018), *Medicaid Accountable Care Organizations: State Update*. Available at: <https://www.chcs.org/media/ACO-Fact-Sheet-02-27-2018-1.pdf>.

² A factsheet on the MassHealth 1115 Waiver is available at <http://www.mass.gov/eohhs/docs/eohhs/healthcare-reform/masshealth-innovations/ma-1115-waiver-factsheet.pdf>.

³ A more detailed description of the MassHealth Waiver authorizing the ACOs is available at: <http://www.mass.gov/eohhs/docs/eohhs/healthcare-reform/masshealth-innovations/ma-1115-waiver-summary.pdf>.

⁴ Massachusetts Department of Health and Human Services, press release August 17, 2017. *MassHealth Partners with 17 Health Care Organizations to Improve Health Care Outcomes for Members*. Available at <http://www.mass.gov/eohhs/gov/newsroom/press-releases/eohhs/masshealth-partners-with-17-health-care-organizations.html>.

⁵ For more information related to DSRIP waivers generally, see Kaiser Family Foundation (September 2014), *An Overview of Delivery System Reform Incentive Payment (DSRIP) Waivers*. Available at: <https://www.kff.org/medicaid/issue-brief/an-overview-of-delivery-system-reform-incentive-payment-waivers/>.

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- ⁶ Massachusetts Department of Health and Human Services, press release (August 28, 2017). *MassHealth Selects 26 Community Partners to Help Improve Health Care for 60,000 Members*. Available at <http://www.mass.gov/eohhs/gov/newsroom/press-releases/eohhs/masshealth-selects-26-community-partners.html>.
- ⁷ Press release: <http://www.mass.gov/eohhs/gov/newsroom/press-releases/eohhs/masshealth-selects-26-community-partners.html>.
- ⁸ For more information on Community Partners, see <http://www.mass.gov/eohhs/docs/eohhs/healthcare-reform/masshealth-innovations/170210-community-partners-meeting.pdf>.
- ⁹ Official documents supporting the MassHealth ACO initiative are available at <http://www.mass.gov/eohhs/gov/departments/masshealth/masshealth-and-health-care-reform.html>.
- ¹⁰ UDS page for BHCHP. <https://bphc.hrsa.gov/uds/datacenter.aspx?q=d&bid=011210&state=MA&year=2016>
- ¹¹ For more information on using the Z59.0 code in a health care setting, see National HCH Council (October 2016), *Ask & Code: Documenting Homelessness Throughout the Health Care System*. Available at: <https://www.nhchc.org/wp-content/uploads/2016/10/ask-code-policy-brief-final.pdf>.
- ¹² For more information about the ACO financing, see MassHealth Delivery System Restructuring: Overview (April 14, 2016). Available at: <http://www.mass.gov/eohhs/docs/eohhs/healthcare-reform/masshealth-innovations/mass-health-restructuring-overview-document.pdf>.
- ¹³ Ash, A., and Mick, E. (October 11, 2016.) *UMass Risk Adjustment Project for MassHealth Payment and Care Delivery Reform: Describing the 2017 Payment Model*. Center for Health Policy and Research. Available at <http://www.mass.gov/eohhs/docs/eohhs/healthcare-reform/masshealth-innovations/1610-umass-modeling-sdh-summary-report.pdf>.
- ¹⁴ MassHealth Risk Adjustment Open Public Meeting. Available at: <http://www.mass.gov/eohhs/docs/eohhs/healthcare-reform/masshealth-innovations/1610-risk-adjustment-open-public-meeting.pdf>.
- ¹⁵ Qualifying serious mental illnesses include acute paranoid reaction and confusion; schizophrenia; other nonorganic psychosis; delusional disorder and paranoid states; bipolar disorder; and major depression. Qualifying substance use disorders include drug induced hallucinations, delusions, and delirium; withdrawal and other specified drug-induced mental disorders; drug dependence; drug abuse without dependence, except alcohol and tobacco; alcohol psychosis; alcohol dependence; and alcohol abuse, without dependence.
- ¹⁶ For more information on these specific measures, see RFR Attachment A Appendix Q new 012517.docx available at <https://www.commbuys.com/bs0/external/bidDetail.sdo?docId=BD-17-1039-EHS01-EHS01-00000009207>.

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APPENDIX A: Quality Measures for Massachusetts ACO

#	Measure	Description
Prevention and Wellness		
1	Well child visits in first 15 months of life	Percentage of ACO Enrollees who turned 15 months old during the measurement period and who had 6 or more well-child visits with a primary care practitioner (PCP) during their first 15 months of life.
2	Well child visits 3-6 yrs	Percentage of ACO Enrollees 3 to 6 years of age who had one or more well-child visits with a PCP during the measurement period.
3	Adolescent well-care visit	Percentage of ACO Enrollees 12 to 21 years of age who had at least one comprehensive well-care visit with a PCP or an obstetrics and gynecology (OB/GYN) practitioner during the measurement period.
4	Weight Assessment / Nutrition Counseling and Physical Activity for Children/Adolescents	Percentage of ACO Enrollees 3 to 17 years of age who had an outpatient visit with a primary care physician (PCP) or an OB/GYN and who had evidence of the following during the measurement period: (1) body mass index (BMI) percentile documentation, (2) counseling for nutrition, and (3) counseling for physical activity.
5	Prenatal Care	Timeliness of Prenatal Care: The percentage of deliveries of live births to ACO Enrollees (up to age 64) between November 6 of the year prior to the measurement year and November 5 of the measurement year that received a prenatal care visit in the first trimester or within 42 days of attribution to the ACO.
6	Postpartum Care	Postpartum Care: The percentage of deliveries of live births to ACO Enrollees (up to age 64) between November 6 of the year prior to the measurement year and November 5 of the measurement year that had a postpartum visit on or between 21 and 56 days after delivery.
7	Oral Evaluation, Dental Services	Percentage of ACO Enrollees under age 21 years who received a comprehensive or periodic oral evaluation as a dental service within the measurement period.
8	Tobacco Use: Screening and Cessation Intervention	Percentage of ACO Enrollees ages 18 to 64 who were screened for tobacco use one or more times within 24 months AND who received cessation counseling intervention if identified as a tobacco user.
9	Adult BMI Assessment	Percentage of ACO Enrollees ages 18 to 64 who had an outpatient visit and who had their body mass index (BMI) documented during the measurement year or the year prior to the measurement period
10	Immunization for Adolescents	Percentage of adolescents 13 years of age who had the recommended immunizations (meningococcal vaccine and one tetanus, diphtheria toxoids and acellular pertussis vaccine (Tdap) or one tetanus, diphtheria toxoids vaccine (Td)) by their 13th birthday. The measure will calculate a combination rate using Combo-1. [2017 HEDIS Spec will be updated Oct 2016 to include HPV vaccine.]
Chronic Disease Management		
11	Controlling High Blood Pressure	Percentage of ACO Enrollees 18 to 64 years of age who had a diagnosis of hypertension (HTN) and whose blood pressure (BP) was adequately controlled during the measurement period, based on age/condition-specific criteria
12	COPD or Asthma Admission Rate in Older Adults	All discharges with a principal diagnosis code for COPD or asthma in adults ages 40 to 64, for ACO Enrollees with COPD or asthma, with risk-adjusted comparison of observed discharges to expected discharges for each ACO.
13	Asthma Medication Ratio	The percentage of members 5–64 years of age who were identified as having persistent asthma and had a ratio of controller medications to total asthma medications of 0.50 or greater during the measurement year.
14	Comprehensive Diabetes Care: A1c Poor Control	The percentage of ACO Enrollees 18 to 64 years of age with diabetes (type 1 and type 2) whose most recent HbA1c level during the measurement year was greater than 9.0% (poor control) or was missing a result, or if an HbA1c test was not done during the measurement year.
15	Diabetes Short-Term Complications Admission Rate	Admissions for a principal diagnosis of diabetes with short-term complications (ketoacidosis, hyperosmolality, or coma) per 100,000 ACO Enrollees months ages 18 to 64. Excludes obstetric admissions and transfers from other institutions.

#	Measure	Description
Behavioral Health / Substance Abuse		
16	Developmental Screening for behavioral health needs: Under Age 21	Percentage of ACO Enrollees under age 21 screened for behavioral health needs using an age appropriate EOHHS approved developmental screen
17	Screening for clinical depression and documentation of follow-up plan: Age 12+	Percentage of ACO Enrollees age 12 to 64 screened for clinical depression using an age appropriate standardized tool AND follow-up plan documented
18	Depression Remission at 12 months	Percentage of ACO Enrollees age 18-64 with major depression or dysthymia and an initial PHQ-9 score > 9 who demonstrate remission at twelve months (Defined as PHQ-9 score less than 5).
		Or a response to treatment at 12 months (+/- 30 days) after diagnosis or initiating treatment. (Patient Health Questionnaire-9 (PHQ-9) score decreased by 50% from initial score at 12 months (+/- 30 days).
19	Initiation and Engagement of AOD Treatment (Initiation)	Percentage of ACO Enrollees ages 13 to 64 diagnosed with a new episode of alcohol or other drug dependency (AOD) during the first 10 and ½ months of the measurement year who initiate treatment through an inpatient AOD admission, outpatient visit, intensive outpatient encounter or partial hospitalization within 14 days of the diagnosis.
20	Initiation and Engagement of AOD Treatment (Engagement)	Percentage of ACO Enrollees ages 13 to 64 diagnosed with a new episode of alcohol or other drug dependency (AOD) during the first 10 and ½ months of the measurement year who initiated treatment and who had two or more additional services with a diagnosis of AOD within 30 days of the initiation visit
21	Follow-Up After Hospitalization for Mental Illness (7-day)	Percentage of discharges for ACO Enrollees ages 6 to 64 who were hospitalized for treatment of selected mental illness diagnoses and who had an outpatient visit, an intensive outpatient encounter or partial hospitalization with a mental health practitioner within 7 days of discharge.
22	Follow-up care for children prescribed ADHD medication - Initiation Phase	Percentage of ACO Enrollees 6 to 12 years of age as of the index prescription start date (IPSD) with an ambulatory prescription dispensed for ADHD medication who had one follow-up visit with a practitioner with prescribing authority during the 30-day initiation phase.
23	Follow-up care for children prescribed ADHD medication - Continuation Phase	Percentage of ACO Enrollees 6 to 12 years of age as of the index prescription start date (IPSD) with an ambulatory prescription dispensed for ADHD medication who remained on the medication for at least 210 days and who, in addition to the visit in the initiation phase, had at least two follow-up visits with a practitioner within 270 days (9 months) after the initiation phase ended.
24	Opioid Addiction Counseling	Percentage of ACO Enrollees ages 18 to 64 with a diagnosis of current opioid addiction who were counseled regarding psychosocial AND pharmacologic treatment options for opioid addiction within the 12 month reporting period.
Long Term Services and Supports		
25	Assessment for LTSS	Percentage of ACO Enrollees (up to age 64) with an identified LTSS need with documentation of an age appropriate EOHHS-approved assessment.
Integration		
26	Utilization of Behavioral Health Community Partner Care Coordination Services	Percentage of ACO Enrollees who are BH-CP eligible (up to age 65) who had at least one Behavioral Health Community Partner care coordination support during the measurement period.
27	Utilization of Outpatient BH Services	Percentage of ACO Enrollees (up to age 65) with a diagnosis of SMI, SED, and/or SUD that have utilized outpatient BH services during the measurement period
28	Hospital Admissions for SMI/SED/SUD Population	Risk-adjusted percentage of ACO Enrollees (up to age 65) with a diagnosis of SMI, SED, and/or SUD who were hospitalized for treatment of selected mental illness diagnoses or substance use disorder (regardless of primary or secondary diagnosis)
29	Emergency Department Utilization for SMI/SED/SUD Population	Risk-adjusted ratio of observed to expected ED visits during the measurement period, for ACO Enrollees (up to age 65) with a diagnosis of SMI, SED, and/or SUD for a selected mental illness or substance use disorder that is either the primary or secondary diagnosis
30	Emergency Department Care Coordination of ED Boarding Population	Percentage of ACO Enrollee boarding in the ED for whom a referral was made by the ED to the PCP or Community Partner (CP) upon discharge. Boarding defined as ≥ 48 hours in the ED.
31	Utilization of LTSS Community Partners	Percentage of ACO Enrollees who are LTSS CP-eligible members (up to age 65) who received at least one LTSS CP support during the measurement period
32	All Cause Readmission among LTSS CP eligible	Percentage of ACO Enrollees who are LTSS CP eligible members (up to age 65) who were hospitalized and subsequently readmitted to a hospital within 30 days following discharge from the hospital for the index admission.

#	Measure	Description
34	Utilization of Flexible Services	Percentage of ACO Enrollees (up to age 65) recommended by their care team to receive flexible services support that received flexible services support.
35	Care Plan Collaboration Across PC, BH, LTSS, and SS, Providers	Percentage of ACO Enrollees (up to age 65) identified for care management/care coordination with documentation of a care plan that: - is developed by/shared with primary care, behavioral health, LTSS, and social service providers, as applicable - addresses needs identified in relevant assessments/screenings - is approved by member (or caregiver, as appropriate).
36	Community Tenure	Measure will assess ACO's ability to support and retain member placement in the community. Measure under development. Potential examples include:
		1. Percentage of ACO Enrollees who transitioned to the community from an LTC facility and did not return to a facility during the subsequent 12 months period.
		2. Percentage of Days in Community for ACO Enrollees with at least one index discharge from a LTC facility: (Total Eligible Days – Total Institutional Care Days)/Total Eligible Days
		3. Average or median days of community tenure for ACO Enrollees with an index discharge (during the measurement year) from a long term stay institution to a community setting who were admitted to a long term stay institution within 180 day period following the index discharge.
Note: Community setting definition should follow CMS HCBS Final Rule 2249-F and 2296-F.		
Avoidable Utilization		
37	Potentially Preventable Admissions	Risk-adjusted ratio of observed to expected ACO Enrollees who were hospitalized for a condition identified as "ambulatory care sensitive"
38	All Condition Readmission	Risk-adjusted ratio of observed to expected ACO Enrollees (up to age 65) who were hospitalized and who were subsequently hospitalized and readmitted to a hospital within 30 days following discharge from the hospital for the index admission.
39	Potentially Preventable Emergency Department Visits	Risk-adjusted ratio of observed to expected emergency department visits for ACO Enrollees ages 18 to 64 per 1,000 member months.